WHAT IS CLAIMED IS:

1. A method for driving a droplet ejection device having an actuator, comprising:

applying a multipulse waveform comprising two or more drive pulses to the actuator to cause the droplet ejection device to eject a single droplet of a fluid,

wherein a frequency of the drive pulses is greater than a natural frequency, f_j, of the droplet ejection device.

2. The method of claim 1, wherein the multipulse waveform has two drive pulses.

3. The method of claim 1, wherein the multipulse waveform has three drive pulses.

4. The method of claim 1, wherein the multipulse waveform has four drive pulses.

5. The method of claim 1, wherein the pulse frequencies are greater than about $1.3 f_j$.

6. The method of claim 5, wherein the pulse frequency is greater than about $1.5 f_j$.

7. The method of claim 6, wherein the pulse frequency is between about $1.5 f_j$ and about $2.5 f_j$.

8. The method of claim 7, wherein the pulse frequency is between about $1.8 f_j$ and about $2.2 f_j$.

9. The method of claim 1, wherein the two or more pulses have the same pulse period.

10. The method of claim 1, wherein the individual pulses have different pulse periods.

11. The method of claim 1, wherein the two or more pulses comprise one or more bipolar pulses.

12. The method of claim 1, wherein the two or more pulses comprise one or more unipolar pulses.

13. The method of claim 1, wherein the droplet ejection device comprises a pumping chamber and the actuator is configured to vary the pressure of the fluid in the pumping chamber in response to the drive pulses.

14. The method of claim 1, wherein each pulse has an amplitude corresponding to a maximum or minimum voltage applied to the actuator, and wherein the amplitude of at least two of the pulses are substantially the same.

15. The method of claim 1, wherein each pulse has an amplitude corresponding to a maximum or minimum voltage applied to the actuator, and wherein the amplitude of at least two of the pulses are different.

16. The method of claim 15, wherein the amplitude of each subsequent pulse in the two or more pulses is greater than the amplitude of earlier pulses.

17. The method of claim 1, wherein the droplet ejection device is an ink jet.

18. A method comprising driving a droplet ejection device with a waveform comprising one or more pulses each having a period less than about 20 microseconds to cause the droplet ejection device to eject a single droplet in response to the pulses.

19. The method of claim 18, wherein the one or more pulses each have a period less than about 12 microseconds.

20. The method of claim 19, wherein the one or more pulses each have a period less than about 10 microseconds.

21. A method comprising driving a droplet ejection device with a multipulse waveform comprising two or more pulses each having a pulse period less than about 25 microseconds to cause the droplet ejection device to eject a single droplet in response to the two or more pulses.

22. The method of claim 21, wherein the two or more pulses each have pulse period less than about 12 microseconds.

23. The method of claim 21, wherein the two or more pulses each have pulse period less than about 8 microseconds.

24. The method of claim 21, wherein the two or more pulses each have pulse period less than about 5 microseconds.

25. The method of claim 21, wherein the droplet has a mass between about 1 picoliter and 100 picoliters.

26. The method of claim 21, wherein the droplet has a mass between about 5 picoliters and 200 picoliters.

27. The method of claim 21, wherein the droplet has a mass between about 50 picoliters and 1000 picoliters.

28. An apparatus, comprising:

a droplet ejection device having a natural frequency f_j; and

drive electronics coupled to the droplet ejection device,

wherein during operation the drive electronics drive the droplet ejection device with a multipulse waveform comprising a plurality of drive pulses having a frequency greater than f_j.

29. The apparatus of claim 28, wherein the harmonic content of the plurality of drive pulses at f_j is less than about 50% of the harmonic content of the plurality of the drive pulses at f_{max}, the frequency of maximum content.

30. The apparatus of claim 29, wherein the harmonic content of the plurality of drive pulses at f_j is less than about 25% of the harmonic content of the plurality of the drive pulses at f_{max}.

31. The apparatus of claim 30, wherein the harmonic content of the plurality of drive pulses at f_j is less than about 10% of the harmonic content of the plurality of the drive pulses at f_{max}.

32. The apparatus of claim 28, wherein during operation the droplet ejection device ejects a single droplet in response to the plurality of pulses.

33. The apparatus of claim 28, wherein the droplet ejection device is an ink jet.

34. An ink jet printhead comprising the ink jet of claim 30.

35. A method for driving a droplet ejection device having an actuator, comprising:

applying a multipulse waveform comprising two or more drive pulses to the actuator to cause the droplet ejection device to eject a droplet of a fluid,

wherein at least about 60% of the droplet's mass is included within a radius, r, of a point in the droplet, where r corresponds to a radius of a perfectly spherical droplet given by

$$r = \sqrt[3]{\frac{3}{4\pi}\frac{m_d}{\rho}},$$

where m_d is the droplet's mass and ρ is the fluid density.

36. The method of claim 35, wherein the droplet has a velocity of at least about 4 ms^{-1}.

37. The method of claim 35, wherein the droplet has a velocity of at least about 6 ms^{-1}.

38. The method of claim 35, wherein the droplet has a velocity of at least about 8 ms^{-1}.

39. The method of claim 35, wherein a frequency of the drive pulses is greater than a natural frequency, f_j, of the droplet ejection device.

40. The method of claim 35, wherein at least about 80% of the droplet's mass is included within r of a point in the droplet.

41. The method of claim 35, wherein at least about 90% of the droplet's mass is included within r of a point in the droplet.